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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/597,853	06/20/2000	Michael E. Gaddis	4959	5728

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EXAMINER

VIG, NARESH

ART UNIT

PAPER NUMBER

3629

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/597,853

Applicant(s)

GADDIS, MICHAEL E.

Examiner

Naresh Vig

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,7,12.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

The preliminary amendment received by the office on 04 August 2000 has been acknowledged and considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6 – 7, 11 – 13, 27 – 30, 32, 34 – 39 and 43 – 48 are rejected under 35 USC 103(a) as being unpatentable over “Interconnection, Peering and Settlements” an article by Geoff Huston hereinafter known as Huston-1 in view of “Interconnection, Peering and Settlements – Part II” an article by Geoff Huston hereinafter known as Huston-2.

Regarding claims 1 and 38, Huston-1 discloses message sent over a network by a backbone carrier [Figures 1, 2].

Huston - 1 discloses internet service providers (ISP) connecting a backbone structure of the backbone carrier to a first internet service provider that has at least a

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first client, connecting the backbone structure to a second internet service provider that has at least a second client [Figure 2], and, exchange of messages between clients on different ISP networks.

Huston-1 does not disclose charging ISPs for transmission of messages and paying the receiving ISP. Huston-2 discloses plurality of method for compensating transmission of messages to a service provider. In Bilateral settlements, a call is originated by a local client, and the local client's service provider charges the client for the duration of the entire end-to-end call. In most general case, the original provider pays the next hop to cover cost of termination of call. The receiving network may be a transit network and undertakes (brokers) settlement with the next hop provider to terminate the call [pages 4-5]. For internet accounting call is replaced by packet at the currency unit of interaction [page 5]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to charge for users (ISPs) for providing transmission services to generate revenue for keeping the system profitable and functional.

Even though Huston-1 and Huston-2 do not disclose software for the equipment used for the infrastructure to function, it would have been obvious to a person with ordinary skill in the art that apparatus used in the infrastructure require software to function to meet business requirements.

Regarding claims 6 and 43, Huston-1 does not disclose charging ISPs for transmission of messages and paying the receiving ISP. Huston-2 discloses plurality of

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method for compensating transmission of messages to a service provider. In Bilateral settlements, a call is originated by a local client, and the local client's service provider charges the client for the duration of the entire end-to-end call. In most general case, the original provider pays the next hop to cover cost of termination of call. The receiving network may be a transit network and undertakes (brokers) settlement with the next hop provider to terminate the call [pages 4-5]. It is obvious that the receiving carrier will pay portion of the charges received to the next carrier to ensure that the receiving carrier has retained the portion of the charges received and not paying the next carrier from their funds (i.e. received funds = fees retained + the portion of funds transferred to the next carrier).

Regarding claims 7, 13 and 44, Huston-1 discloses message sent over a network by a backbone carrier [Figures 1, 2]. Huston - 1 discloses exchange of messages between clients on different ISP networks.

Huston-1 does not disclose charging ISPs for transmission of messages and paying the receiving ISP. Huston-2 discloses plurality of method for compensating transmission of messages to a service provider. In Bilateral settlements, a call is originated by a local client, and the local client's service provider charges the client for the duration of the entire end-to-end call. In most general case, the original provider pays the next hop to cover cost of termination of call. The receiving network may be a transit network and undertakes (brokers) settlement with the next hop provider to

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terminate the call [pages 4-5]. For internet accounting call is replaced by packet at the currency unit of interaction [page 5]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to charge for users (ISPs) for providing transmission services to generate revenue for keeping the system profitable and functional.

Even though Huston-1 and Huston-2 do not disclose software for the equipment used for the infrastructure to function, it would have been obvious to a person with ordinary skill in the art that apparatus used in the infrastructure require software to function to meet business requirements.

Regarding claim 11, Huston-1 does not disclose to retain portion of charges. Huston-2 discloses service providers to retain portion of charges. Therefore, it is known at the time of invention to a person with ordinary skill in the art to retain portion of charges to realize revenue at the time the service is provided.

Regarding claim 12, Huston-1 does not disclose charging ISPs for transmission of messages and paying the receiving ISP. Huston-2 discloses plurality of method for compensating transmission of messages to a service provider. In Bilateral settlements, a call is originated by a local client, and the local client's service provider charges the client for the duration of the entire end-to-end call. In most general case, the original provider pays the next hop to cover cost of termination of call. The receiving network

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may be a transit network and undertakes (brokers) settlement with the next hop provider to terminate the call [pages 4-5]. It is obvious that the receiving carrier will pay portion of the charges received to the next carrier to ensure that the receiving carrier has retained the portion of the charges received and not paying the next carrier from their funds (i.e. received funds = fees retained + the portion of funds transferred to the next carrier).

Regarding claim 27, it is business choice to elect whether to charge flat fee or variable fee to their clients for providing the requested services. For example, ISP are known to provide tier based pricing to their customer for providing access to the internet.

Regarding claims 28 – 30, Huston-1 discloses message originator to be an ISP, a network (does not restrict the network to be public or private), individual etc.

Regarding claim 32, it would have been obvious to a person with ordinary skill in the art that end-to-end system performance include requirements for individual customers (response time they expect), the backbone (end-to-end delay), and for end-to end system performance (system availability, throughput etc.).

Regarding claims 34 – 35, it is a business choice to elect how to charge the users.

Regarding claims 36, 45 and 47, Huston-1 discloses message sent over a network by a backbone carrier [Figures 1, 2]. Huston - 1 discloses exchange of messages between clients on different ISP networks.

Huston-1 does not disclose charging ISPs for transmission of messages and paying the receiving ISP. Huston-2 discloses plurality of method for compensating transmission of messages to a service provider. In Bilateral settlements, a call is originated by a local client, and the local client's service provider charges the client for the duration of the entire end-to-end call. In most general case, the original provider pays the next hop to cover cost of termination of call. The receiving network may be a transit network and undertakes (brokers) settlement with the next hop provider to terminate the call [pages 4-5]. For internet accounting call is replaced by packet at the currency unit of interaction [page 5]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to charge for users (ISPs) for providing transmission services to generate revenue for keeping the system profitable and functional.

Even though Huston-1 and Huston-2 do not disclose software for the equipment used for the infrastructure to function, it would have been obvious to a person with ordinary skill in the art that apparatus used in the infrastructure require software to

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function to meet business requirements. It is obvious that the software is computer program, and, computer programs are instructions executable by computer (data processing system) to function.

Regarding claims 37, 46 and 48, Huston-1 discloses message sent over a network by a backbone carrier [Figures 1, 2]. Huston - 1 discloses exchange of messages between clients on different ISP networks.

Huston-1 does not disclose charging ISPs for transmission of messages and paying the receiving ISP. Huston-2 discloses plurality of method for compensating transmission of messages to a service provider. In Bilateral settlements, a call is originated by a local client, and the local client's service provider charges the client for the duration of the entire end-to-end call. In most general case, the original provider pays the next hop to cover cost of termination of call. The receiving network may be a transit network and undertakes (brokers) settlement with the next hop provider to terminate the call [pages 4-5]. For internet accounting call is replaced by packet at the currency unit of interaction [page 5]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to charge for users (ISPs) for providing transmission services to generate revenue for keeping the system profitable and functional.

Even though Huston-1 and Huston-2 do not disclose software for the equipment used for the infrastructure to function, it would have been obvious to a person with ordinary skill in the art that apparatus used in the infrastructure require software to

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function to meet business requirements. It is obvious that the software is computer program, and, computer programs are instructions executable by computer (data processing system) to function.

Claims 2 – 5, 8 – 10, 14 – 23, 31 and 39 – 42 are rejected under 35 USC 103(a) as being unpatentable over “Interconnection, Peering and Settlements” an article by Geoff Huston hereinafter known as Huston-1 in view of “Interconnection, Peering and Settlements – Part II” an article by Geoff Huston hereinafter known as Huston-2 in further view of “IP QoS” an article by Matthew Lucas and John Yin hereinafter known as Lucas.

Regarding claims 2 and 39, Huston-1 does not disclose compensating based upon Quality of Service (QoS). Lucas disclose compensation based upon QoS [page 34]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to compensate services providers based upon QoS to ensure the service provider is meeting the Service Level Agreement (SLAs).

Regarding claims 3 and 40, Huston-2 discloses one party invoices the other party for service provided. Huston-1 does not disclose compensating based upon Quality of

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Service (QoS). Lucas disclose compensation based upon QoS [page 34]. Therefore, it is known at the time of invention to a person with ordinary skill in the art that first services provider can compensate their services providers based upon QoS to ensure the service provider is meeting the Service Level Agreement (SLAs).

Regarding claims 4 and 41, Huston-1 does not disclose compensating based upon Quality of Service (QoS). Lucas disclose compensation based upon QoS [page 34]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to compensate services providers based upon QoS to ensure the the service provider is meeting the Service Level Agreement (SLAs).

Regarding claims 5 and 42, Huston-1 does not disclose to retain charges by the backbone carrier. Huston-2 discloses retaining charges by the backbone carrier. Neither Huston-1 nor Huston-2 disclose compensating based upon Quality of Service (QoS). Lucas disclose compensation based upon QoS [page 34]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to compensate services providers based upon QoS to ensure the the service provider is meeting the Service Level Agreement (SLAs).

Regarding claim 8, Huston-1 does not disclose compensating based upon Quality of Service (QoS). Lucas disclose compensation based upon QoS [page 34]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to compensate services providers based upon QoS to ensure the service provider is meeting the Service Level Agreement (SLAs).

Regarding claim 9, Huston-1 does not disclose invoicing the originating party based upon the service provided. Huston-1 discloses to invoice originating party for the service provided [page 5]. Therefore, it is known at the time of invention to a person with ordinary skill in the art that service providers can invoice their customers to collect funds for the services rendered. Neither Huston-1 nor Huston-2 disclose compensating based upon Quality of Service (QoS). Lucas disclose compensation based upon QoS [page 34]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to invoice customers for service provided based upon QoS rendered to ensure the service provider is not penalized for the deteriorated QoS provided by the providing service provider.

Regarding claim 10, Huston-1 does not disclose invoicing the originating party based upon the service provided. Huston-1 discloses to invoice originating party for the service provided [page 5]. Therefore, it is known at the time of invention to a person with

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ordinary skill in the art that service providers can invoice their customers to collect funds for the services rendered. Neither Huston-1 nor Huston-2 disclose compensating based upon Quality of Service (QoS). Lucas disclose compensation based upon QoS [page 34]. Therefore, it is known at the time of invention to a person with ordinary skill in the art to invoice customers for service provided based upon QoS rendered to minimize the overhead in resolving the QoS disputes.

Regarding claims 14 – 23, Huston-1 does not disclose compensation based upon Quality of Service (QoS). Lucas disclose compensation based upon QoS [page 34]. It would have been obvious to a person with ordinary skill in the art that agreed upon QoS, minimum performance criteria, committed rate, burst rate, penalties, terms and conditions etc. can be dictated in SLAs. Therefore, it is known at the time of invention to a person with ordinary skill in the art to compensate services providers based upon QoS to ensure the service provider is meeting the Service Level Agreement (SLAs).

Regarding claim 31, Huston-1 does not disclose performance criteria to receive compensation. Lucas discloses tiered based compensation based upon service level. Therefore, it is known at the time of invention to a person with ordinary skill in the art to compensate service providers based upon performance criteria to ensure that the business does not overpay the service provider to the deteriorated services.

Claim 24 is rejected under 35 USC 103(a) as being unpatentable over "Interconnection, Peering and Settlements" an article by Geoff Huston hereinafter known as Huston-1 in view of "Interconnection, Peering and Settlements – Part II" an article by Geoff Huston hereinafter known as Huston-2 in further view of "IP QoS" an article by Matthew Lucas and John Yin hereinafter known as Lucas and "IP Quality Of Service" an article by Markus Peuhkuri.

Regarding claim 24, Huston-1 does not disclose charging fees based upon class of service for which the message originator has signed up. Lucas discloses WYPIWYG (what you pay is what you get i.e. class of service). In addition, Peuhkuri discloses that the class of service concept divides network traffic into different classes and provides class-dependent service to each packet depending on what class it belongs to. Therefore, it is known at the time of invention to a person with ordinary skill in the art to charge fees based upon class of service to charge additional fees to customers who demand special service performance.

Claims 25 – 26 and 33 are rejected under 35 USC 103(a) as being unpatentable over “Interconnection, Peering and Settlements” an article by Geoff Huston hereinafter known as Huston-1 in view of “Interconnection, Peering and Settlements – Part II” an article by Geoff Huston hereinafter known as Huston-2 in further view of “IP Quality Of Service” an article by Markus Peuhkuri.

Regarding claim 25, The method of claim 7, Huston-1 does not disclose class of service assigned to the message. Peuhkuri discloses that the class of service concept divides network traffic into different classes and provides class-dependent service to each packet depending on what class it belongs to. Therefore, it is known at the time of invention to a person with ordinary skill in the art that class of service encoding to the message can be used to communicate about its QoS.

Regarding claim 26, Herson-1 does not disclose to retain charges. Herson-2 discloses to retain charges (brokering) for handling the message. Peuhkuri discloses that the class of service concept divides network traffic into different classes and provides class-dependent service to each packet depending on what class it belongs to. In addition, it is known at the time of invention that customers who desire special services are charged based upon the QoS, and, class of service allows application end-to-end to communicate about their QoS characteristics. Therefore, it would have been obvious to a person with ordinary skill in the art the receiving network will retain charges

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based on requested QoS to get agreed upon compensation for the special services rendered to service the message.

Regarding claim 33, Hanes-1 does not disclose how the users are charged. However, it would have been obvious to a person with ordinary skill in the art to charge higher fees to customers who demand better QoS (charged differently). Peuhkuri discloses that the class of service concept divides network traffic into different classes and provides class-dependent service to each packet depending on what class it belongs to. Also, it is known at the time of invention to a person with ordinary skill in the art that 2 end users (originator and terminator) are not required to have the same QoS to communicate. Therefore, it is known at the time of invention to a person with ordinary skill in the art that the message originator and message terminator can have different QoS to meet their business requirements, and, the fees charged and compensation paid are based upon the agreed upon QoS.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

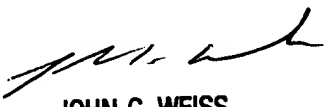
1. Kilkki US Patent 6,047,326
2. Ginzboorg et al. US Patent 6,047,051
3. Fulp et al. US Patent 6,055,571
4. Quest Launches Digital Subscriber Line Service.
5. Protocol Or Header Indication – Methods To Request Quality Or Service For IP-Applications an article by Gerald Eichler and Ralph Widera.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naresh Vig whose telephone number is 703.305.3372. The examiner can normally be reached on M-F 7:30 - 5:00 (Alt Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on 703.308.2702. The fax phone numbers for the organization where this application or proceeding is assigned are 703.305.7687 for regular communications and 703.305.7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.3900.

Naresh Vig
June 23, 2003


JOHN G. WEISS
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